



chain nodes :  
 10 13 14 18  
 ring nodes :  
 1 2 3 4 5 6 7 8 9  
 chain bonds :  
 7-10 8-13 13-14  
 ring bonds :  
 1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9  
 exact/norm bonds :  
 1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 7-10 8-9  
 exact bonds :  
 8-13 13-14  
 isolated ring systems :  
 containing 1 :

Match level :  
 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 13:CLASS  
 14:Atom 18:Atom 19:CLASS

Generic attributes :  
 14:  
 Saturation : Unsaturated  
 18:  
 Saturation : Unsaturated  
 Number of Carbon Atoms : less than 7  
 Number of Hetero Atoms : 2 or more  
 Type of Ring System : Monocyclic

Element Count :  
 Node 18: Limited  
 C,C4  
 N,N2  
 O,O0  
 S,S0

10/597,473 (species in claim 9)

=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1840

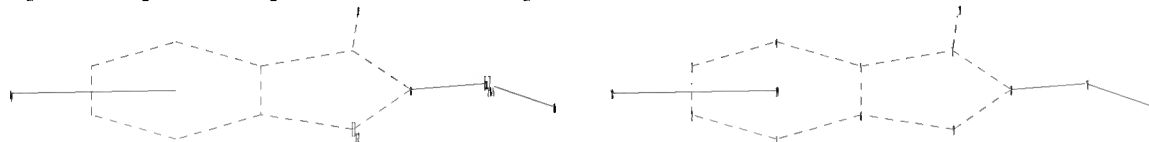
L1 SCREEN CREATED

=> screen 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L2 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\10597473 (amd).str



chain nodes :

10 13 14 18

ring nodes :

1 2 3 4 5 6 7 8 9

chain bonds :

7-10 8-13 13-14

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 7-10 8-9

exact bonds :

8-13 13-14

isolated ring systems :

containing 1 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS

13:CLASS 14:Atom 18:Atom 19:CLASS

Generic attributes :

14:

Saturation : Unsaturated

18:

Saturation : Unsaturated

Number of Carbon Atoms : less than 7

Number of Hetero Atoms : 2 or more

Type of Ring System : Monocyclic

Element Count :

Node 18: Limited

C,C4

N,N2

10/597,473 (species in claim 9)

O, O0  
S, S0

L3 STRUCTURE UPLOADED

=> que L3 AND L1 NOT L2

L4 QUE L3 AND L1 NOT L2

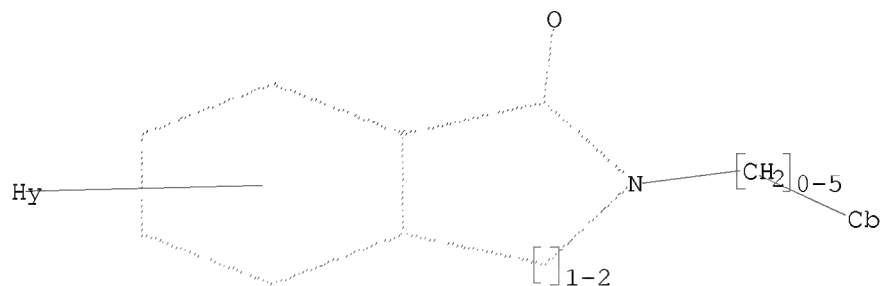
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L4 HAS NO ANSWERS

L1 SCR 1840

L2 SCR 2016 OR 2026 OR 2039 OR 2040 OR 2045 OR 2047

L3 STR



Structure attributes must be viewed using STN Express query preparation.

L4 QUE L3 AND L1 NOT L2

=> s 14 sss sam

SAMPLE SEARCH INITIATED 13:24:38 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 48495 TO ITERATE

4.1% PROCESSED 2000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 956744 TO 983056

PROJECTED ANSWERS: 0 TO 0

L5 0 SEA SSS SAM L3 AND L1 NOT L2

=> s 14 sss ful

FULL SEARCH INITIATED 13:25:01 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 973842 TO ITERATE

97.6% PROCESSED 950281 ITERATIONS

24 ANSWERS

10/597,473 (species in claim 9)

100.0% PROCESSED 973842 ITERATIONS  
SEARCH TIME: 00.00.23

24 ANSWERS

L6 24 SEA SSS FUL L3 AND L1 NOT L2

=> => s 16

L7 6 L6

=> d 17 1-6 bib,ab,hitstr

L7 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN  
 AN 2007:1092624 CAPLUS  
 DN 147:385820  
 TI Preparation of oxoisoindolinyphenylpropanoates and its analogs for the  
 treatment of spinal muscular atrophy and other uses  
 IN Heemskerk, Jill; Barnes, Keith D.; McCall, John M.; Johnson, Graham;  
 Fairfax, David; Johnson, Matthew Robert  
 PA United States Dept. of Health and Human Services, USA; Albany Molecular  
 Research, Inc.; Science Applications International Corporation (SAIC)  
 SO PCT Int. Appl., 280 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007109211	A2	20070927	WO 2007-US6772	20070313
	WO 2007109211	A3	20071213		
	W:		AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW		
	RW:		AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA		
	AU 2007227398	A1	20070927	AU 2007-227398	20070313
	CA 2645426	A1	20070927	CA 2007-2645426	20070316
	EP 2027088	A2	20090225	EP 2007-753404	20070316
	R:		AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS		
	JP 2009530306	T	20090827	JP 2009-500525	20070316
	IN 2008CN04932	A	20090313	IN 2008-CN4932	20080916
	CN 101500995	A	20090805	CN 2007-80015589	20081030
	US 20090312323	A1	20091217	US 2008-293268	20081230
PRAI	US 2006-783292P	P	20060317		
	WO 2007-US6772	W	20070313		

OS MARPAT 147:385820

AB The title compds. I or II [W = C(O), C(S), CH<sub>2</sub>; B = CH<sub>2</sub>, CH(C<sub>n</sub>H<sub>2n+1</sub>) (wherein n = 1-8); C = fused thiophene, fused pyridine, cyclohexane (any of which can be saturated or contain one or two non-conjugated double bonds); R<sub>1</sub>, R<sub>2</sub> = H, alkyl; or R<sub>1</sub> and R<sub>2</sub> may be taken together with the carbon atom to which they are attached to form a cycloalkyl ring or carbonyl group; R<sub>3</sub> = H, halo, alkyl, etc.; R<sub>4</sub>-R<sub>7</sub> = H, OH, halo, etc.; with the proviso], useful for the treatment of spinal muscular atrophy or other uses, were prepared and claimed. E.g., a multi-step synthesis of I [B = CH<sub>2</sub>; W = C(O); R<sub>1</sub> = H; R<sub>2</sub> = Me; X = CO<sub>2</sub>H; R<sub>6</sub> = Cl; R<sub>3</sub>-R<sub>5</sub>, R<sub>7</sub> = H], starting from 2-(4-nitrophenyl)propanoic acid, was given. Compds. I and II were tested for their ability to increase SMN expression in cervical carcinoma cell lines (data given for representative compds. I). This invention also relates to methods of using compds. I or II to increase SMN expression, increase EAAT2 expression, or increase the expression of a nucleic acid

that encodes a translational stop codon introduced by mutation or frameshift.

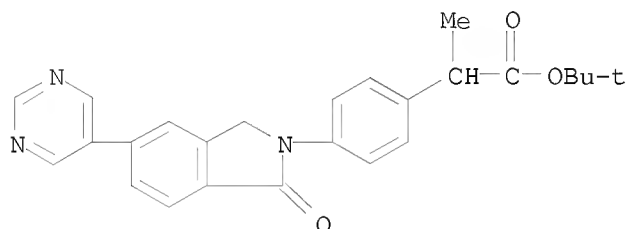
IT 950735-69-0P 950735-75-8P 950737-49-2P  
950737-58-3P 950738-16-6P 950738-32-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of oxoisindolinyphenylpropanoates and its analogs for the treatment of spinal muscular atrophy and other uses)

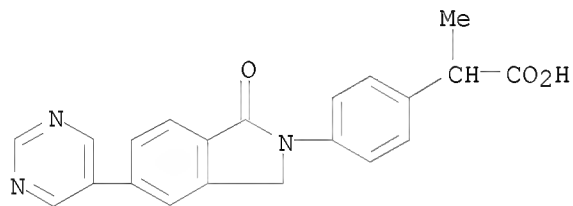
RN 950735-69-0 CAPLUS

CN Benzeneacetic acid, 4-[1,3-dihydro-1-oxo-5-(5-pyrimidinyl)-2H-isindol-2-yl]- $\alpha$ -methyl-, 1,1-dimethylethyl ester (CA INDEX NAME)



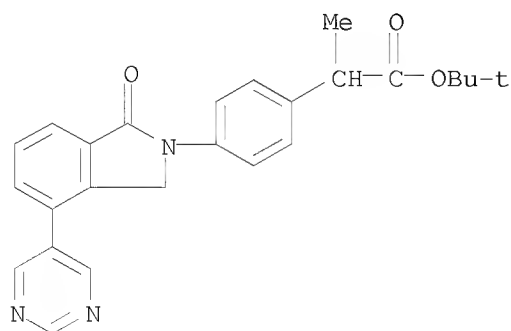
RN 950735-75-8 CAPLUS

CN Benzeneacetic acid, 4-[1,3-dihydro-1-oxo-5-(5-pyrimidinyl)-2H-isindol-2-yl]- $\alpha$ -methyl- (CA INDEX NAME)



RN 950737-49-2 CAPLUS

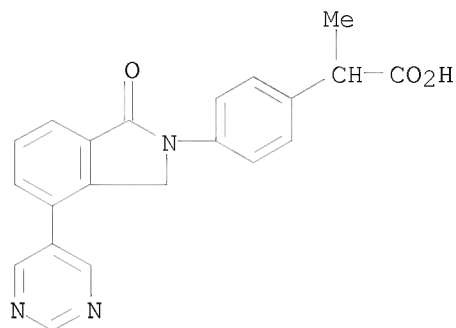
CN Benzeneacetic acid, 4-[1,3-dihydro-1-oxo-4-(5-pyrimidinyl)-2H-isindol-2-yl]- $\alpha$ -methyl-, 1,1-dimethylethyl ester (CA INDEX NAME)



10/597,473 (species in claim 9)

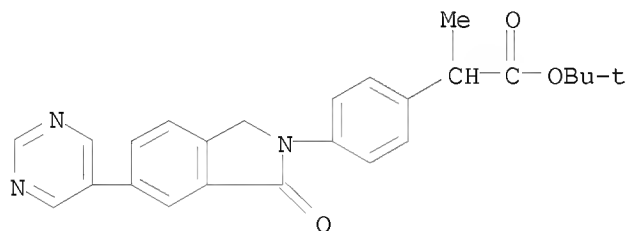
RN 950737-58-3 CAPLUS

CN Benzeneacetic acid, 4-[1,3-dihydro-1-oxo-4-(5-pyrimidinyl)-2H-isoindol-2-yl]- $\alpha$ -methyl- (CA INDEX NAME)



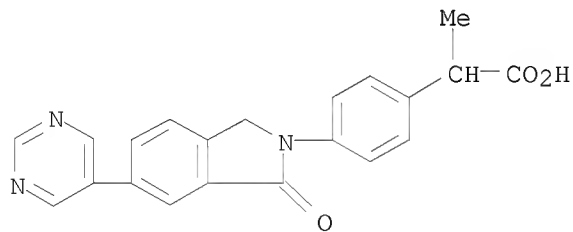
RN 950738-16-6 CAPLUS

CN Benzeneacetic acid, 4-[1,3-dihydro-1-oxo-6-(5-pyrimidinyl)-2H-isoindol-2-yl]- $\alpha$ -methyl-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 950738-32-6 CAPLUS

CN Benzeneacetic acid, 4-[1,3-dihydro-1-oxo-6-(5-pyrimidinyl)-2H-isoindol-2-yl]- $\alpha$ -methyl- (CA INDEX NAME)



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L7 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN  
 AN 2007:935084 CAPLUS  
 DN 147:301003  
 TI Azacyclyl-substituted aryldihydroisoquinolinones as MCH antagonists,  
 process for their preparation and their use as medicaments  
 IN Schwink, Lothar; Stengelin, Siegfried; Gossel, Matthias; Hessler, Gerhard;  
 Haack, Torsten; Lennig, Petra  
 PA Sanofi-Aventis, Fr.  
 SO PCT Int. Appl., 259pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2007093364	A1	20070823	WO 2007-EP1212	20070213
W: AE, AG, AL, AM, AT, <u>AI</u> , <u>AZ</u> , BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2007214709	A1	20070823	AU 2007-214709	20070213
CA 2636873	A1	20070823	CA 2007-2636873	20070213
EP 1987020	A1	20081105	EP 2007-711518	20070213
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				
JP 2009526793	T	20090723	JP 2008-554653	20070213
MX 2008009743	A	20080807	MX 2008-9743	20080730
IN 2008CN04218	A	20090313	IN 2008-CN4218	20080811
KR 2008095877	A	20081029	KR 2008-719922	20080813
US 20090264403	A1	20091022	US 2008-191662	20080814
CN 101384583	A	20090311	CN 2007-80005779	20080815
PRAI DE 2006-102006007045	A	20060215		
WO 2007-EP1212	W	20070213		

# ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 147:301003

AB The invention relates to azacyclyl-substituted aryldihydroisoquinolinones of formula I and their derivs., and their physiol. tolerated salts and physiol. functional derivs., their preparation, medicaments comprising at least one azacyclyl-substituted aryldihydroisoquinolinone of the invention or its derivative, and the use of the azacyclyl-substituted aryldihydroisoquinolinones of the invention and their derivs. as MCH antagonists. Compds. of formula I wherein R1, R1', R1'', R1''' and R2 are independently H, F, Cl, Br, I, OH and derivs., CF3, NO2, CN, OCF3, etc.; X is S, O, and (un)substituted ethylene; A is a bond an a 1- to 8-membered linker; B is H, NH2 and derivs. m HO-C1-4 alkyl, C1-8 alkyl, C2-8 alkenyl, etc.; Y is (un)substituted Et and (un)substituted ethylene; Q is (un)substituted (un)saturated (mono/bi/tri/spiro)azacyclyl; and their method for preparation are claimed. Example compound II was prepared by a multistep



procedure (procedure given). All the invention compds. were evaluated for their MCH antagonistic activity. From the assay, it was determined that compound

II exhibited an IC50 value of 0.99  $\mu$ M.

IT 947144-98-1P 947146-05-6P

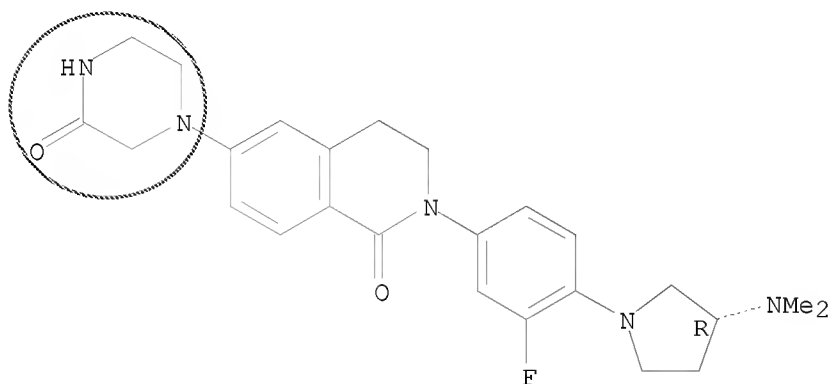
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of azacyclyl-substituted aryldihydroisoquinolinones as MCH antagonists)

RN 947144-98-1 CAPLUS

CN 1(2H)-Isoquinolinone, 2-[4-[(3R)-3-(dimethylamino)-1-pyrrolidinyl]-3-fluorophenyl]-3,4-dihydro-6-(3-oxo-1-piperazinyl)- (CA INDEX NAME)

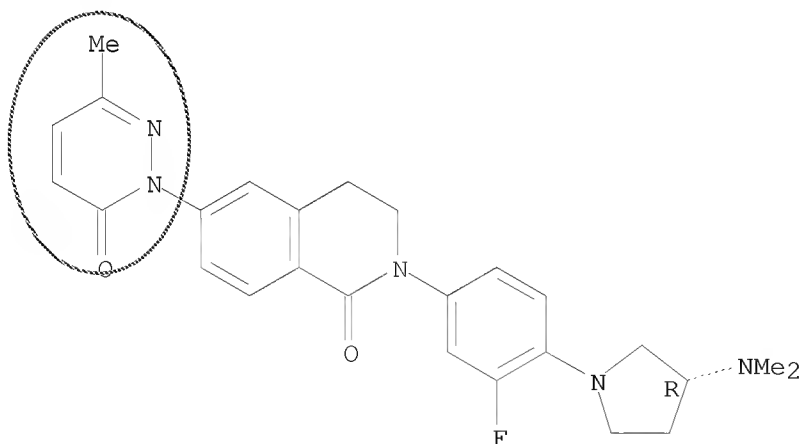
Absolute stereochemistry.



RN 947146-05-6 CAPLUS

CN 1(2H)-Isoquinolinone, 2-[4-[(3R)-3-(dimethylamino)-1-pyrrolidinyl]-3-fluorophenyl]-3,4-dihydro-6-(3-methyl-6-oxo-1(6H)-pyridazinyl)- (CA INDEX NAME)

Absolute stereochemistry.



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)  
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

10/597,473 (species in claim 9)

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN  
 AN 2007:198351 CAPLUS  
 DN 146:274220  
 TI Preparation of metabotropic glutamate-receptor-potentiating isoindolones  
 IN Van Wagenen, Bradford; Ukkiramapandian, Radhakrishnan; Clayton, Joshua;  
 Egle, Ian; Empfield, James; Isaac, Methvin; Ma, Fupeng; Slassi,  
 Abdelmalik; Steelman, Gary; Urbanek, Rebecca; Walsh, Sally  
 PA Astrazeneca AB, Swed.; NPS Pharmaceuticals, Inc.  
 SO PCT Int. Appl., 57pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007021308	A1	20070222	WO 2006-US5246	20060215
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	WO 2006020879	A1	20060223	WO 2005-US28760	20050812
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	EP 1912939	A1	20080423	EP 2006-720758	20060215
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	JP 2009509920	T	20090312	JP 2008-525976	20060215
	IN 2008DN00934	A	20090320	IN 2008-DN934	20080131
	CN 101277934	A	20081001	CN 2006-80036311	20080331
	US 20080227794	A1	20080918	US 2008-63007	20080529
PRAI	WO 2005-US28760	A	20050812		
	US 2004-601125P	P	20040813		
	US 2005-684945P	P	20050527		
	WO 2006-US5246	W	20060215		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS CASREACT 146:274220; MARPAT 146:274220

AB The title compds. I [R1 = 3-7 membered ring that may contain one or more heteroatoms; R2, R3 = H, alkyl; R4 = H and R6 = H, OH, F, etc.; R5 = H, halo, NO2, etc.; R7 = H, halo, CN, etc.; R8, R9 = H, halo, NO2, etc.; n =

1; with the proviso], useful in therapy as metabotropic glutamate receptors modulators, particularly in neurol. and psychiatric disorders, were prepared Exemplary processes for preparation of compds. I are given. For example, reacting Me 2-bromomethylbenzoate with 4-(4-fluorophenoxy)benzylamine afforded 60% II. Generally, compds. I were active in assays described herein at concns. less than 10  $\mu$ M. Pharmaceutical composition comprising the compound I is disclosed.

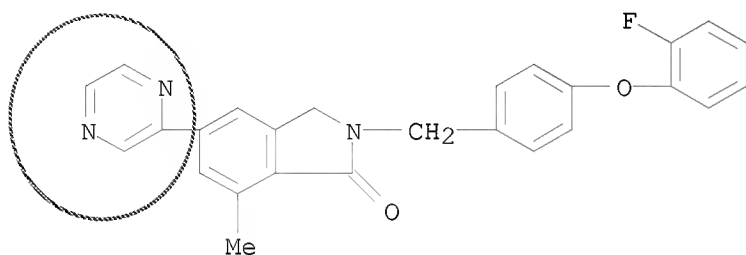
IT 877146-96-8P 877146-99-1P 877147-02-9P  
877147-06-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of novel metabotropic isoindolone compds. that function as potentiators of glutamate receptors useful as disease preventive and therapeutic agents)

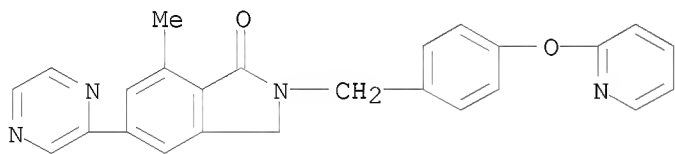
RN 877146-96-8 CAPLUS

CN 1H-Isoindol-1-one, 2-[[4-(2-fluorophenoxy)phenyl]methyl]-2,3-dihydro-7-methyl-5-(2-pyrazinyl)- (CA INDEX NAME)



RN 877146-99-1 CAPLUS

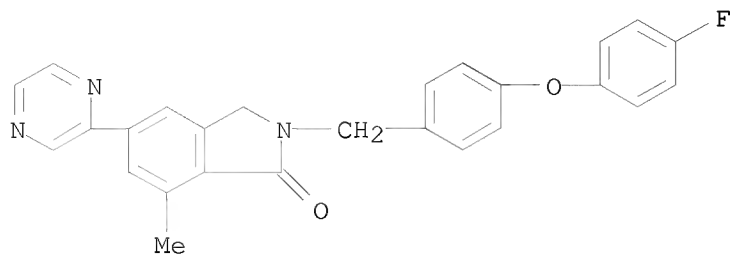
CN 1H-Isoindol-1-one, 2,3-dihydro-7-methyl-5-(2-pyrazinyl)-2-[[4-(2-pyridinyloxy)phenyl]methyl]- (CA INDEX NAME)



RN 877147-02-9 CAPLUS

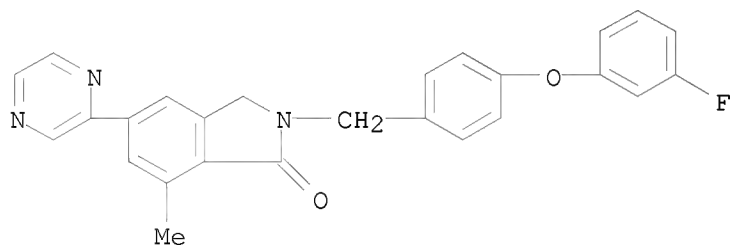
CN 1H-Isoindol-1-one, 2-[[4-(4-fluorophenoxy)phenyl]methyl]-2,3-dihydro-7-methyl-5-(2-pyrazinyl)- (CA INDEX NAME)

10/597,473 (species in claim 9)



RN 877147-06-3 CAPLUS

CN 1H-Isoindol-1-one, 2-[[4-(3-fluorophenoxy)phenyl]methyl]-2,3-dihydro-7-methyl-5-(2-pyrazinyl)- (CA INDEX NAME)



OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)  
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN  
 AN 2006:167946 CAPLUS  
 DN 144:254003  
 TI Preparation of isoindolones as metabotropic glutamate receptor  
 potentiators  
 IN Clayton, Joshua; Ma, Fupeng; Van Wagenen, Bradford; Ukkiramapandian,  
 Radhakrishnan; Egle, Ian; Empfield, James; Isaac, Methvin; Slassi,  
 Abdelmalik; Steelman, Gary; Urbanek, Rebecca; Walsh, Sally  
 PA Astrazeneca AB, Swed.; NPS Pharmaceuticals, Inc.  
 SO PCT Int. Appl., 424 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006020879	A1	20060223	WO 2005-US28760	20050812
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	AU 2005272738	A1	20060223	AU 2005-272738	20050812
	CA 2575853	A1	20060223	CA 2005-2575853	20050812
	EP 1778634	A1	20070502	EP 2005-785509	20050812
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	CN 101039907	A	20070919	CN 2005-80034786	20050812
	JP 2008509926	T	20080403	JP 2007-525831	20050812
	BR 2005014005	A	20080527	BR 2005-14005	20050812
	WO 2007021308	A1	20070222	WO 2006-US5246	20060215
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	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	WO 2007021309	A1	20070222	WO 2006-US5247	20060215
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SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,  
 VN, YU, ZA, ZM, ZW  
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EP 1912939	A1	20080423	EP 2006-720758	20060215
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EP 1912940	A1	20080423	EP 2006-720759	20060215
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,			
	IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR			
JP 2009509920	T	20090312	JP 2008-525976	20060215
JP 2009509921	T	20090312	JP 2008-525977	20060215
NO 2007000583	A	20070308	NO 2007-583	20070131
MX 2007001282	A	20070418	MX 2007-1282	20070131
IN 2007DN00870	A	20070803	IN 2007-DN870	20070201
KR 2007097405	A	20071004	KR 2007-702667	20070201
IN 2008DN00864	A	20090320	IN 2008-DN864	20080131
IN 2008DN00934	A	20090320	IN 2008-DN934	20080131
CN 101309905	A	20081119	CN 2006-80035377	20080325
CN 101277934	A	20081001	CN 2006-80036311	20080331
US 20080227794	A1	20080918	US 2008-63007	20080529
US 20090111830	A1	20090430	US 2008-63018	20080723
US 20090275578	A1	20091105	US 2008-659149	20080825
PRAI US 2004-601125P	P	20040813		
US 2005-684945P	P	20050527		
WO 2005-US28760	W	20050812		
WO 2006-US5246	W	20060215		
WO 2006-US5247	W	20060215		

# ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS CASREACT 144:254003; MARPAT 144:254003

AB The title compds. I [R1 = (un)substituted 3-7 membered ring that may contain one or more heteroatoms selected from N, O and S; R2, R3 = H, alkyl, aryl, etc.; R4, R6 = H, OH, halo, etc.; R5 = H, halo, NO2, etc.; R7 = H, halo, NO2, etc.; R8, R9 = H, halo, NO2, etc.; or, where n is greater than 1, two or more R8 and/or R9 on adjacent carbons may be absent to form an alkenyl or alkynyl moiety], useful as metabotropic glutamate receptor modulators, particularly in neurol. and psychiatric disorders, were prepared E.g., a multi-step synthesis of II, was given. Generally, compds. I were active in assays described (e.g., mGluR2 assay) at concns. (or with EC50 values) less than 10  $\mu$ M. The pharmaceutical composition comprising the compound I is disclosed.

IT 877145-62-5P	877146-22-0P	877146-84-4P
877146-86-6P	877146-93-5P	877146-96-8P
877146-99-1P	877147-02-9P	877147-04-1P
877147-06-3P		

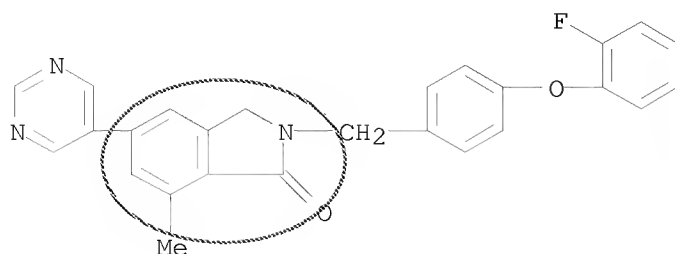
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of isoindolones as metabotropic glutamate receptor potentiators)

RN 877145-62-5 CAPLUS

CN 1H-Isoindol-1-one, 2-[[4-(2-fluorophenoxy)phenyl]methyl]-2,3-dihydro-7-methyl-5-(5-pyrimidinyl)- (CA INDEX NAME)

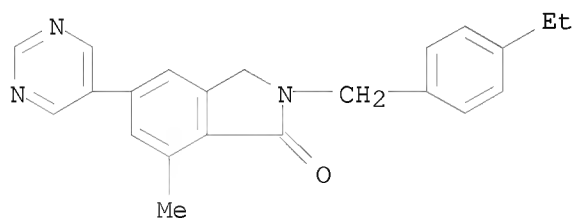
10/597,473 (species in claim 9)



Generic claim 1 does not include compounds wherein R1 forms a bond with the phenyl ring.  
Only claim 9 contains one species having iso-quinolinone

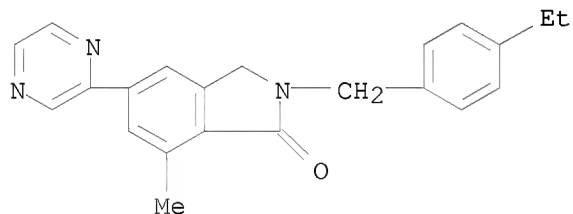
RN 877146-22-0 CAPLUS

CN 1H-Isoindol-1-one, 2-[(4-ethylphenyl)methyl]-2,3-dihydro-7-methyl-5-(5-pyrimidinyl)- (CA INDEX NAME)



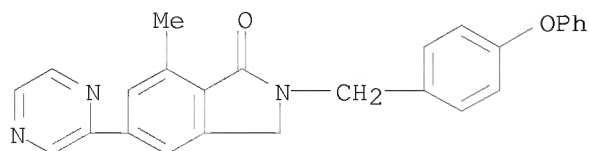
RN 877146-84-4 CAPLUS

CN 1H-Isoindol-1-one, 2-[(4-ethylphenyl)methyl]-2,3-dihydro-7-methyl-5-(2-pyrazinyl)- (CA INDEX NAME)



RN 877146-86-6 CAPLUS

CN 1H-Isoindol-1-one, 2,3-dihydro-7-methyl-2-[(4-phenoxyphenyl)methyl]-5-(2-pyrazinyl)- (CA INDEX NAME)

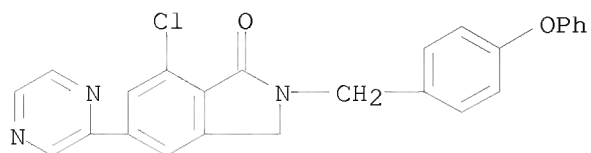


RN 877146-93-5 CAPLUS

CN 1H-Isoindol-1-one, 7-chloro-2,3-dihydro-2-[(4-phenoxyphenyl)methyl]-5-(2-pyrazinyl)- (CA INDEX NAME)

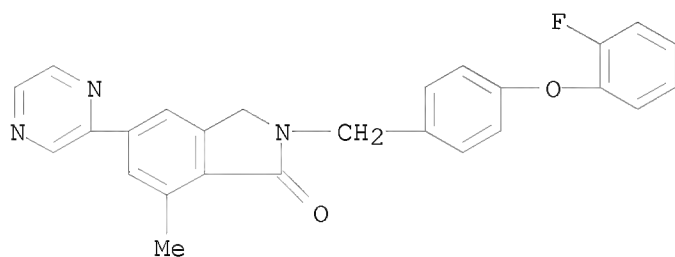


10/597,473 (species in claim 9)



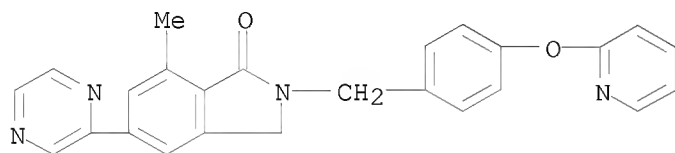
RN 877146-96-8 CAPLUS

CN 1H-Isoindol-1-one, 2-[[4-(2-fluorophenoxy)phenyl]methyl]-2,3-dihydro-7-methyl-5-(2-pyrazinyl)- (CA INDEX NAME)



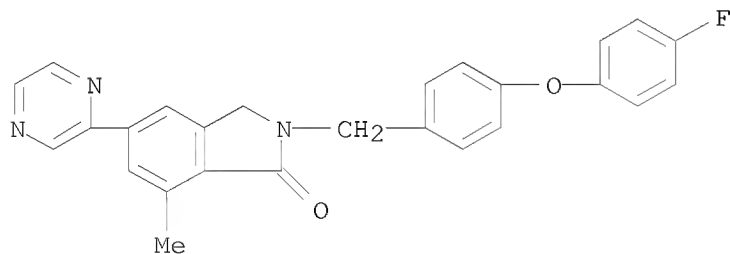
RN 877146-99-1 CAPLUS

CN 1H-Isoindol-1-one, 2,3-dihydro-7-methyl-5-(2-pyrazinyl)-2-[[4-(2-pyridinyloxy)phenyl]methyl]- (CA INDEX NAME)



RN 877147-02-9 CAPLUS

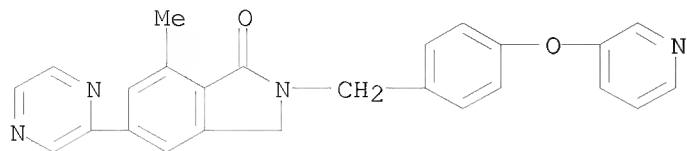
CN 1H-Isoindol-1-one, 2-[[4-(4-fluorophenoxy)phenyl]methyl]-2,3-dihydro-7-methyl-5-(2-pyrazinyl)- (CA INDEX NAME)



RN 877147-04-1 CAPLUS

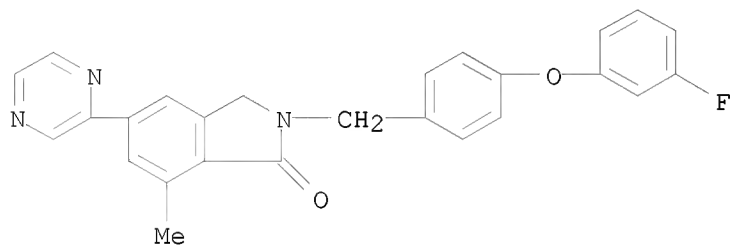
CN 1H-Isoindol-1-one, 2,3-dihydro-7-methyl-5-(2-pyrazinyl)-2-[[4-(3-pyridinyloxy)phenyl]methyl]- (CA INDEX NAME)

10/597,473 (species in claim 9)



RN 877147-06-3 CAPLUS

CN 1H-Isoindol-1-one, 2-[[4-(3-fluorophenoxy)phenyl]methyl]-2,3-dihydro-7-methyl-5-(2-pyrazinyl)- (CA INDEX NAME)



OSC.G 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)  
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN  
 AN 2005:823509 CAPLUS  
 DN 143:229572  
 TI Preparation of benzamides for treating a disorder mediated by  
 inappropriate ROCK-1 activity  
 IN Drewry, David Kendall; Jung, David Kendall; Linn, James Andrew; Hunter,  
 Robert Neil, III; Lee, Dennis; Stavenger, Robert A.; Sehon, Clark  
 PA Smithkline Beecham Corporation, USA  
 SO PCT Int. Appl., 47 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

Applicant's

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005074643	A2	20050818	WO 2005-US3479	20050128
	WO 2005074643	A3	20060309		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW,			SM
	RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	EP 1713775	A2	20061025	EP 2005-712794	20050128
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR, IS			
	JP 2007519754	T	20070719	JP 2006-551626	20050128
	US 20080275062	A1	20081106	US 2006-597473	20060727
PRAI	US 2004-540621P	P	20040130		
	WO 2005-US3479	W	20050128		

## ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS CASREACT 143:229572; MARPAT 143:229572

AB The title compds. I [R1 = H, alkyl or as indicated by the dotted line is fused to the Ph forming a 5-6 membered ring, optionally containing a double bond; n = 0-4; R2 = (un)substituted aryl, etc.; or when n = 0 then NR1R2 = 5-6 membered monocyclic heterocyclic ring or 9-10 membered bicyclic heterocyclic ring; X = indazolyl, pyrazolyl, (un)substituted pyridyl, pyrimidinyl], useful for treating disorders mediated by inappropriate ROCK-1 activity, were prepared E.g., a 3-step synthesis of II, starting from Me 4-bromobenzoate and 4-pyridylboronic acid, was given. All exemplified compds. I showed inhibitory activity vs. Rock-1 with a pIC50 of 5.0 or greater. The pharmaceutical composition comprising the compound I is disclosed.

IT 862723-25-9P 862723-37-3P

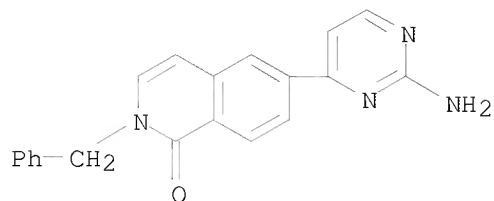
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzamides for treating a disorder mediated by inappropriate ROCK-1 activity)

RN 862723-25-9 CAPLUS

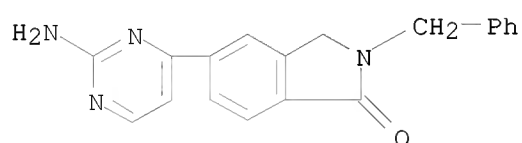
CN 1(2H)-Isoquinolinone, 6-(2-amino-4-pyrimidinyl)-2-(phenylmethyl)- (CA INDEX NAME)

10/597,473 (species in claim 9)



RN 862723-37-3 CAPLUS

CN 1H-Isoindol-1-one, 5-(2-amino-4-pyrimidinyl)-2,3-dihydro-2-(phenylmethyl)-  
(CA INDEX NAME)



OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)  
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN  
 AN 2001:614327 CAPLUS  
 DN 135:180781  
 TI Preparation of herbicidal isoindolinonyl-and  
 3,4-dihydroisoquinolonyl-substituted heterocycles  
 IN Theodoridis, George; Crawford, Scott D.  
 PA FMC Corporation, USA  
 SO U.S., 15 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6277847	B1	20010821	US 2000-538800	20000330
PRAI	US 1999-127700P	P	19990402		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 135:180781

AB The title compds. [I; Q = II-IV; X = H, halo, alkyl, etc.; Y = H, halo, alkyl, etc.; Z = H, alkyl, halo, etc.; n = 1-2; R = H, NH<sub>2</sub>, alkyl, etc.; R<sub>1</sub> = H, NH<sub>2</sub>, alkyl, etc.], useful as pre-emergent and post-emergent herbicides, were prepared E.g., a 5-step synthesis of I [Q = II; X = Cl; Z, Y = H; n = 1; R = iso-Pr; R<sub>1</sub> = Me], was given. Biol. data for compds. I were presented.

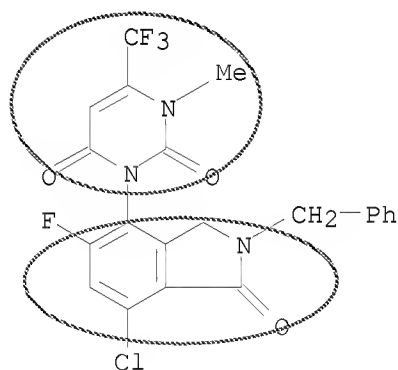
IT 1102228-40-9

RL: PRPH (Prophetic)

(Preparation of herbicidal isoindolinonyl-and  
 3,4-dihydroisoquinolonyl-substituted heterocycles)

RN 1102228-40-9 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 3-[7-chloro-5-fluoro-2,3-dihydro-1-oxo-2-(phenylmethyl)-1H-isoindol-4-yl]-1-methyl-6-(trifluoromethyl)- (CA INDEX NAME)

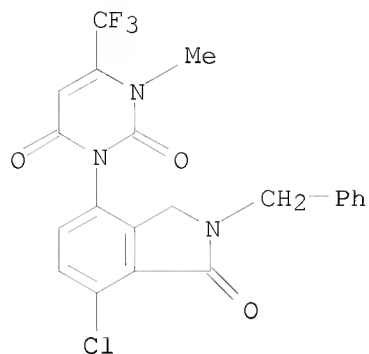


IT 355389-28-5P 355389-55-8P 355389-57-0P  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of herbicidal isoindolinonyl-and  
 3,4-dihydroisoquinolonyl-substituted heterocycles)

RN 355389-28-5 CAPLUS

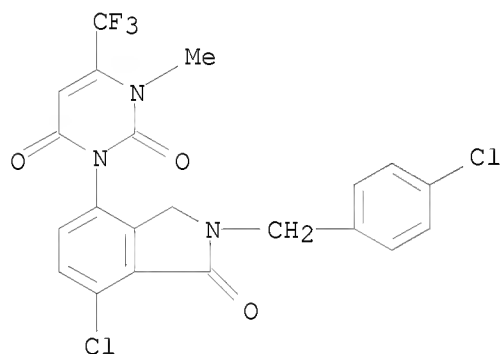
CN 2,4(1H,3H)-Pyrimidinedione, 3-[7-chloro-2,3-dihydro-1-oxo-2-(phenylmethyl)-1H-isoindol-4-yl]-1-methyl-6-(trifluoromethyl)- (CA INDEX NAME)

10/597,473 (species in claim 9)



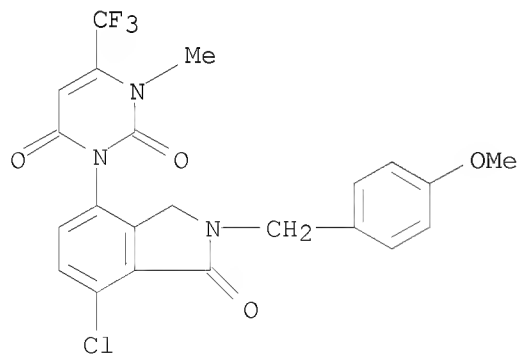
RN 355389-55-8 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 3-[7-chloro-2-[(4-chlorophenyl)methyl]-2,3-dihydro-1-oxo-1H-isoindol-4-yl]-1-methyl-6-(trifluoromethyl)- (CA INDEX NAME)



RN 355389-57-0 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 3-[7-chloro-2,3-dihydro-2-[(4-methoxyphenyl)methyl]-1-oxo-1H-isoindol-4-yl]-1-methyl-6-(trifluoromethyl)- (CA INDEX NAME)



OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

10/597,473 (species in claim 9)

10/597,473 (species in claim 9)

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

35.36

228.10

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-5.10

-5.10

STN INTERNATIONAL LOGOFF AT 13:25:56 ON 07 FEB 2010